3385.1.ST25.txt
SEQUENCE LISTING

<110> Shigeta, Ron T.
Siani-Rose, Michael A.

<120> Nucleic Acid Encoding Growth Factor Protein

<130> 3385.1

<140> 10/083,853
<141> 2002-02-26

<150> 60/272,663
<151> 2001-01-03

<150> 60/272,663
<151> 2001-03-01

<160> 2

<170> PatentIn version 3.2

<210> 1
<211> 317
<212> PRT
<213> Homo Sapiens

<400> 1

Met Gly Lys Asp Phe Met Ser Lys Thr Pro Lys Ala Met Ala Thr Lys
1   5   10   15

Ala Lys Ile Asp Lys Trp Asp Leu Ile Lys Leu Lys Ser Phe Cys Thr
            20   25   30

Ala Lys Glu Thr Thr Ile Arg Val Asn Arg Gln Leu Thr Glu Trp Glu
        35   40   45

Lys Ile Phe Ala Thr Tyr Ser Phe Asp Lys Gly Leu Ile Ser Arg Ile
    50   55   60

Tyr Asn Glu Leu Lys Gln Ile Tyr Lys Lys Thr Lys Asn Pro Ile
65   70   75   80

Lys Lys Trp Val Lys Asp Met Asn Arg His Phe Ser Lys Glu Gly Ile
                85   90   95

Tyr Ala Ala Lys Lys His Met Lys Lys Tyr Ser Ser Ser Leu Ala Ile
                100   105   110

Arg Glu Met Gln Ile Lys Thr Thr Met Arg Tyr His Leu Thr Pro Val
            115   120   125

Arg Met Ala Ile Ile Lys Lys Ser Gly Asn Asn Arg Asp Met Asp Glu
    130   135   140

Page 1

```
Ala Gly Asn His His Ser Gln Gln Thr Ile Thr Arg Thr Lys Asn Gln
145                 150                 155                 160


Thr Pro His Val Leu Thr His Arg Trp Ile Leu Gln Gln Ser His Trp
            165                 170                 175


Val Thr Val Leu Ser Asp Ile Ser Glu Leu Met His Lys Thr Asp Arg
            180                 185                 190


Ile Val Asn Leu Leu Met Cys Met Tyr Leu Leu Thr Val Asp Leu Asp
            195                 200                 205


Arg Leu Asn Asp Asp Ala Lys Arg Tyr Ser Cys Thr Pro Arg Asn Tyr
    210                 215                 220


Ser Val Asn Ile Arg Glu Glu Leu Lys Leu Ala Asn Val Val Phe Phe
225                 230                 235                 240


Pro Arg Cys Leu Leu Val Gln Arg Cys Gly Gly Asn Cys Gly Cys Gly
            245                 250                 255


Thr Val Asn Trp Arg Ser Cys Thr Cys Asn Ser Gly Lys Thr Val Lys
            260                 265                 270


Lys Tyr His Glu Val Leu Gln Phe Glu Pro Gly His Ile Lys Arg Arg
        275                 280                 285


Gly Arg Ala Lys Thr Met Ala Leu Val Asp Ile Gln Leu Asp His His
    290                 295                 300


Glu Arg Cys Asp Cys Ile Cys Ser Ser Arg Pro Pro Arg
305                 310                 315
```

<210> 2
<211> 29921
<212> DNA
<213> Homo Sapiens

<400> 2
```
gtatatgtaa gaaagcctca tcttttgatt tttaatatac aagatgcttt ctttaagaga        60

gcaagattca aaattgtttt gtgtttcaaa atttaaaaat aaatttatct cctaaatttt       120

ctaaagacat gtttcatata tttgaccatc ccttattttg gcaaaggatt ttaagagtct       180

aactcaaaca tatgtaagct ctggtgtacc tggttatata taccaaaaaa aacatttgat       240

ctatatacac atagacatga atatatttct gtgtgtgttt gtgcatatat aacctcaaac       300

actattatta aatgcaatcc tatattctta ggtatagaag ttgatgatat acctttctac       360
```
Page 2

```
ttgccatggc attaacaaag caaggctgag actcagcaac cacttgtgtt cattgcattg    420

caggctagta gtaagtttgg ttgctggtag gaaaagggtc tcttatctca ccctccttaa    480

actaaaggtt ctttcaggct taatgtaagg atgtgcacat tctcttatcg aggtggtctt    540

gagctgcaga tacaatcaca tcgttcatgg tgatccaact ggatgtcaac tagagccatg    600

gtcttagctc tacccctcct cttgatgtgg ccaggctcaa actgtaatac ctaggacaag    660

aagcacatct cctgttagaa agcctttgga gttcaactca gtcagatgcc acctacttat    720

tacctttttg acaactagtt cttagccctt tgagaaccca acagaagcta tgggcttgct    780

attagaatgc acacgttgct attagaatgt acacatttt caaataattg actccctgaa    840

gtggaggaat caattgatcc cagagtaatg cccagcataa cttacctgaa gtacccagat    900

gatttcatgt gtcttagcag gtatttatta atagctttct aagggcctgc tttgggccaa    960

gtactgttcc aaatattatc gtaaagatcc ttctgaccaa ggcatgtgtt atagatgaat   1020

acaatacttg agcatattat tagcatggag aggaaaatga atacaaccat gaataaaata   1080

tgctggtata tctaaatctt tggttgaagt aaaacatgtt gccctggagt tgctggcaag   1140

atggccgaac aggaacagct ctggtctgca gttcccagcg agatcaatgc agaaggcggg   1200

tgatttctcc attcccaact gaggtaccca gttcatctca ctgggactgg ttagacattg   1260

ggtgcagccc acggaaggtg agctgaagca gggtggggtg tcccctcagc cgcgaagtgc   1320

aaggggtgg gggatctcct tcccccagcc aagggaagcc atgagagact gtaccaggag   1380

gaatggtgca ctctagtcca gatactgcac ttttcccata gtctttgcaa ctggcagacc   1440

aggagatttc ccccagtgcc tatgccacca gggccctggg tttcaagcac aaaactgggc   1500

ggccatttgg acagacaccg agctagccgc agcagtttat ttttcatacc ccagtggcgc   1560

ctggaatgcc agcaagacag aaccattcac tccagggatc caagtggtct ggctcagtgg   1620

gtcccacccc catggagccc agctagctaa gatccactgg cttgaaattc tcctgccagc   1680

acagcagtct gagattgacc tgggatgctt gagcttggtg aggggagggg cgtctgccat   1740

tgctgaggct tgagtaggcg aggcggtttt accctcaaag tgtaaacaaa gctactggga   1800

agtttgaatg gggcgcccac cgcagctcag caaggccgct gtggcaaact gcctctctag   1860

attcctcctt tttgggcagg tcatctctga aagaaaggca gcagccccag tcagggactt   1920

atagataaaa cccccatctc cctgggacag agaacctggg ggaaggggtg gctgtgggtg   1980

cagcttctca gacttaaaca ttcctgcctg gaggctctga agagagcagc ggatctccca   2040

gcacagcatt tgagctctga taagggacag gctgcctcct caagtgggtc cctgacccc    2100

atgtatcctg actgggagac atctcccatt aggggccaat agacatttca tacaggagac   2160

agggtctgga gtggacctcc agcaaactcc agcagacctg cagcagagcg gcctgactgt   2220
```

```
tagaaggaaa agtaacaaac agaaaggaat agtatcaaca ttaacaaaaa ggacatccac    2280

tcagagaccc catctgaagg tcaacaacat caaagaccaa aggtaaataa aaccaaaaag    2340

atgggaaaaa ccagtgcaga aacactgaaa attccaaaaa ccagaactcc tcttctcaac    2400

caaaggatca caactcctcg ccagcaaggg aacaaaacca gatggagaat gagtttgagg    2460

aattgacaga agtaggcttc agaaggtggg taataacaaa ctcctccgag ctaaaggagc    2520

atgttctaac ccaatgcaag gaagctaaga accttgaaaa aaggttagat gaattgctaa    2580

ctagaataat cagtgtagag aagaacataa atgacctgat ggagctgaaa aacgcaagac    2640

aagaacttca tgaagcatac acaagcttca atagccaaat cgatcaagca gaagaaagga    2700

tatcagtgat tgaagatcaa attaataaaa gaaagtgaga agacaagatt acagaaaaaa    2760

gagtgaaaag aaacaaacaa agcctccaag aattatggga ctatgtgaaa agaccaaatc    2820

tacatttgat tggtgtcccc caaagtgatg gggagaatgg aatcaagttg gaaaacactc    2880

ttcagggtat tatccaggag aatttcccca tctatcaggg caggccaaca ttcaaattca    2940

ggaaatatgg agaacaccat aaagatactc ctcgagaaga acaatcccaa gacacataat    3000

cttcagattc accaaggttg aaatgaagga aaaaatgtta agggcagcca gagagaaagg    3060

ttgggttacc cacaaaggga agccaatcag actaacagcg gatctcccgg cagaaaccct    3120

acaagccaga agagagtgag ggccaatatt ccacattctt aaagaaaata attttcaacc    3180

cagaatttca tatccagcca aaccaagctt cctaagtgaa ggagaaataa aatcctctac    3240

agagaagcaa atgctgacag attttgtca ccaccaggcc tgccttacaa gagctcctga     3300

aggaagcacc aacatggaaa ggaacaactg gtaccagcca ctgcaaaaac atcccaaatt    3360

gtaaagacca ttgatgctat gaagaaagtg catcaactaa cgggcaaaat aaccagctag    3420

tgtcataatg gcaggatcaa attcacacat aataatatta accttaaatg taaatgggct    3480

aaattcccca attaaaagac acagactggc aaattggata aagagtcaag acccatcagt    3540

gtgctgtatt caggaggccc atctcacatg aaaagacaca cataggctca aaataaaggg    3600

atggaggaag atttaccaag taaatggaaa acaaaaaaaa aaagcagggg ttgcaatcct    3660

agtctctgat aaaacagact ttaaaccaac aaagatcaaa agagacaaag aaggccatta    3720

cataatggta aaggcatcaa tggaacaaga agagctaact atcctaaata tacatgcacc    3780

caatacagga gcacccagat tcataaagca agttcttaga gacctacaaa gagactttga    3840

ctcccacaca ataatagtgg gagtctaaat aataaataga cactttaaca ccccactgcc    3900

aatattaggc agatcaatga gacagaaaat taacaaggat atccaggagt tgaactgagc    3960

tctggaccaa gcggacctaa tagatatcta cagaactccc caccccaaat caacagaata    4020

tacactcttc tcagcatcac attcaccta ttttaaaatt gaccatgtaa ttttaagtaa     4080

aacactcctc agcaaatgca aaagaacaga aatcctaaca aacagtctct cagactacag    4140
```

```
tgcaatctat ttagaactca gaattaagaa actcactcaa aatcacacaa ctacatggaa    4200

actgaacaac ctgctcctga atgactactg ggtaaataac aaaatgaagg caaaaataaa    4260

gatgttcttt gaaaccaatg agaacaaaga cacaatgtac cagaatctct ggggcatatt    4320

taaagcagtg tgtagaggga aatttatagc actagatgcc tacaagagaa agcaggaaat    4380

atctaaaata gacaccttaa catcacaatt aaaagaacta gagaagaaag agcaaacaaa    4440

ttcaaaagct agcagaagac aagaaataac taagatcaga gcagaactga aggagataga    4500

gacacaaaaa gcccttcaaa taaatcaatg aatccaggag ctggtttttt gaaaagatca    4560

gcaaaataga ccactagaca gactaataaa gaagaaaaga gagaagaatc aaagagatgc    4620

aataaaaaat gataaagggg atatcaccac cgatcccaca gaaatacaaa ctattatcag    4680

agaatattat aaacacctct atgcaaataa actagaaaat ctagaagaaa tggataaatt    4740

cctggacaca tatgtagcct gtatggacct tgggggacag aacaaaaggg ggtgaatgca    4800

gaaataaaag acaaagacaa aagagtatgt ttggaagtag gggtcagggg gcaacttgcc    4860

tctaatggac aagggccctg agctttacac caccctctgt atttattagg caaaagagat    4920

agcgagaggg tgagttggaa gaagaggtca gctgttaggt ccagagtagg cctgcaagac    4980

tgcattcctc aaacaatagg ctctagatgt cccagtagat aacctcaagg agccagtgcc    5040

agggagtgat ggccctcagc aaaccttcta gggcaggcac agaagtaagt ttgcccacat    5100

tctgtattca cgataaacag tttgctgttt gatcaagtag cctccagtgg aatgctgagt    5160

tggtcatgat ccctttggcc tttttggctc ccaaaacaca tacaccctct caagactaaa    5220

ccaggaagaa gtcaaatccc tgaatatacc agtaacaagt tctaaaattg aagcagtaat    5280

tgatagccta ccaaccaaaa aaagtccagg accagacgga ttcacagcca aattctacca    5340

gaggtacaaa gagaagctgg tactattcct tctgaaacta ttccaaaaaa tagaaaatgg    5400

gaatcctccc taactcattt tacgaggcca gcatcatcct gataccaaaa cctagcagtg    5460

acacaacaaa aagaggaaat ttcaggccca tatccctgat gaacattgat gtgaaaatcc    5520

tcaataaaat actggcaaac caaatccagc agcacatcaa aaagcttatc taccatgatc    5580

aagttggcgt catccctggg atgcaaggct ggttcaaaat atgcaaatca ataaatgtag    5640

gccatcacat aaacagaacc aatgacaaaa accacatgat tatctcaata gatgcagaaa    5700

aggcctttgt caaaattcaa cagcccttca tgctaaaaat tctcagtaaa ctaggtatcg    5760

atggaatgta tctcaaaata ataagagcta tttatacaaa cccacagcca atatcatact    5820

gaatgggcaa aaactggaag cattcccttt gagaactggc acaagacaag gatgccctct    5880

ctcaccactc ctattcaaga tactattgga agttctggcc agggcaatca ggcaatagaa    5940

agaaataaag ggtattcaaa tagaaagaga ggaagtcata ttgtctctgt ttgcagatga    6000
```

```
catgtttgta tatttagaaa accccatcgt ctcaggccaa aaactcctta agctgataag    6060

caacttcagc aaagtctcag gacacaaaat caatgtgcaa aaatcacaag cattcttata    6120

cgccaataat agacaaacag agagccaaat catgagtgaa ctctcattca caattgctac    6180

aaagagaata aaatacctag gaatacaact tacaagggac acgtaggaac tcttcaagga    6240

gaactacaaa ccactgatca aggaaataag agaggacaca aacaaatgga aaaacattcc    6300

atgctcacag atagtaagaa tcatgaaaat gccatactgc ccaaagtaaa ttatagattc    6360

agtgctaccc ccatcaagct accattgact ttcttcacag aattggaaaa aacaacttta    6420

aatttcatat ggaaccaaaa aaagagccca cagagccaag acaatcttaa gcaaaaagaa    6480

caaagctgga ggtatcatgc tacctgactt aaaactatac tataaggcta cagtaaccaa    6540

aactgcatgg tactggtacc aaaacagata tatagaccaa tggaacagaa cagagacctc    6600

agaaattaca ctgcaatcta catccatctg atctttgaca aacctgacaa aaacaagcaa    6660

tggaaaaagg attccctatt taataaatgg tgttggaaaa actggctagc catatgcaga    6720

aagctgaaac tggatccctt ccttacacct tatacaaaag ttaactcaag atgaattaaa    6780

gacttaaata taagacataa aaccataaaa acccagaaga aaacctaggc ataccattc     6840

aggatatgga catgggcaaa gacttcatga ctaaaacacc aaaagcaatg gcaacaaaag    6900

ccaaaataga caagtgggat ctgattaaac tatagagctt ctgcacagca aaaaaaaact    6960

gtcatcagag tgaacaagca acctacagaa tgggagaaaa ttttgcaat ctatcgatct     7020

gacaaaggct aatatccaga gatctacgaa gaacttaaac aaatttacaa gaaaaaaaca    7080

accccgtcaa aatatgggca aaggatatga gcagacactt ctcaaaagaa gacatttatg    7140

cagccaacaa acatatgaaa aaaacctcat catcattggt cgttagagaa atgcaaaaca    7200

aaaccacagt gacataccat ctcatgctag ttagaatggt gatcactaaa aagtcaggaa    7260

acaacaaatg ctggagagga tgtggagaaa taggaacact tttccactgt tggtgggaat    7320

gtaaattagt tcaaccattg tggaagacag tgtggagatt ccttaaggat ctagaaccag    7380

aaatatcatt tgacccagca atcccattac tgagtatata cccaaaggaa tataaatcat    7440

tctattataa agacacatgc acacatatgt ttattgcagc actgatcaca atagcaaaga    7500

cttggaacca acccaaatgt ccatcagtga tagactggat aaagaaaaca tggcacatat    7560

acaccatgaa atactatgca gccataaaaa ggatgagttc atgtcctttg cagagatatg    7620

gatgaagctg gaaaccatca ttctcagcaa actaacacaa gaacagaaaa ccaaacacca    7680

catgttctca cttgtaagtg ggagttgaac aatgagaaga catggacaca gggagggaa     7740

catcacacac caggtcctgt ttgtgggtgc gggactaggg aagggatagc attaggagaa    7800

atacctaatg tagatgacgg gttgatgggt gcagcaagcc accatggcac atgtatacct    7860

atgtaacaaa cctgcacatt ctgcacatgt accccacaac ttaaagtatt aaaaaaaaaa    7920
```

```
cacacaacat gttgccctga tgaaggtcat tagtggccat aaataagtaa aatgtgtttt   7980

atgtttttat atatttgtta acatataata tcctttacca tttaaaacaa atcaggttcc   8040

actaaaatct ttgtatatta atacctgtgt atcaatacag catttcttaa atcaataagt   8100

atatcattaa ttttttaaatt cataagttta aacataattt cttaaattag tagttaaata   8160

gaagccaacc cttcttccct gcagtggcct tcatttagtg aaatattagc tattacatag   8220

acatatactt ggtaaaattc cattcttgtt ttctaatata catagtcaga ttaatatatt   8280

atttacttta tgttcttaga tcccggttag cctttatttt tgattttgtc ccattttcct   8340

tttagattct aaacttggtc atggcaccat taaacaattc tatagcattt tacagttttt   8400

gaataatttg cacaggcact attttttttt ttcttttttac cctcagacaa atctttcaca   8460

tggtggaaaa ggtatcatta tgcccacttt atactgagat tctaaaggag gataagtacc   8520

ttgtccaggg tcttcccctg acttggacct gggaccagga cctgggatca ggacatttaa   8580

gctcctagca tattctgact tgaggcctct ctaacatgcc ttcaatttcc ttttatgtct   8640

caagggtgtg tctggctccc catgtgaacc ggcagggaga cctgtgatgc tttgcttgaa   8700

cttttgtcct aggtgaaagt tagatgcctg gagtcccctg cactcatgca tcacggtctg   8760

cacattcctt tcatttagaa ttttgccatg ctgttccata gacggtccag tgaggcaggg   8820

aataaatcac tgcatttgtt taatgttcaa tcaagttagg gcactctgct gatgcagaat   8880

ggaagatgga gatctgtttg tagaaaaact tcaaaagact tgtcagtaca aagttggcag   8940

ggggtggagg aaggaatacc ctaagaaagt tctttaggga gacaaagtgt cagaaatttt   9000

gatattggta aagctagtcc aaaggccagt tttgatagtt gattctatta tcatctcctg   9060

caattctatt gcacttacaa taggtacctt ggaaggggtt ggggtttgga ctcccatagc   9120

tttgccaaga atttctccaa gatgaattaa ttgctatttt ccaagactat ctggcctgta   9180 ·

aaagagattt gagaactagg ggatgcagga gagggaaatt atttctaaga agctgagcat   9240

atgataaata ttccttgttt aaagaagact gttatcaagg cctaataatt tgtgatgact   9300

ggcacctgta aaatcagagc tttgtcgatt tgctttctca tttgacggca aacaaaagtg   9360

tgtgctttgg dataagagca agagcctggg cagtttttct aactggtctt ctgattgttc   9420

agggattttc tctgtgtttt atattaagca acgtgagcac ggtatatatg tgttttgctg   9480

ataagaagag aaaaatgaat tggcagacac ctttttccag acaagacagg agagcactat   9540

ttgaacaaag tggaaattgg actgccttac tggatgatca cagcactgat gttcaaagct   9600

ttcagatcat gtaatagtct taggttcagg tacacagcat tgaaagaagg aagaaagcaa   9660

ggctgatttg agggcatgta gaaaaatgaa aagcctttat ctgagaaagc aaactggcgg   9720

ttataggtta tctggtcacc tttaaaggga aggaacactg aattaattat aggagctgaa   9780
```

```
gggcacttgt taataggtac cctcacacaa cactttctta ttttctgagc tatgattcac    9840

agctggaagc acacaaccag aaataacaaa tccactggcg ggcaaccagc atttcttaac    9900

acctatgggt gcaaatgggg atcttgactc ctctccactc tggaaaacca cacaaagcca    9960

gggaaacttg acgtctacta aatggagtgt gactgagcca attggtgggt ttcataccac   10020

catacaaaat caaagatgct cagttttgca aattacctca tcacaaaaga tatttaacta   10080

cagttactca ccttgttgcc aataaacgtc tgaataaatc ttcaccataa agctatttac   10140

actaataaaa caataccagg cagaaaagct atctgctgag tctggttctt gtttattgag   10200

aatataaaaa aaggctgtta aggcttgtaa cagttctcaa attaatggct gacttaggaa   10260

cacaagtacg tatttcagga caaatgcatt atataaaccc aaatcattaa gagtttaaga   10320

ttcttccttt tttttttttt tttttttttt gagatggagt ttcagtcttc ttgcccaggc   10380

tagagtgcaa tggtgtgatc ccgggtcact gcaacctcca cctcccgggt tcaagtgatt   10440

ctcctgcctc agcctcccaa gtagctggga ctacaggcac gtgccaccac gcctggctaa   10500

tttttgtatt tttagtagag atgggtttcc ccacgttggc caggctggtc ttgaactcct   10560

gacctcaggt gatctgcctg cctcagcctc ccaaaatgct gggattacag gcatgagcca   10620

ctgcgcccgg tctcttccta acttctaaac caggctgttt tcagcacaca cagtttctca   10680

aggaaaaaaa aaagcttctc ttttgatctc tttcatgctt atagccttta taaaaaatgt   10740

acacagagtc aatattttta agggatgcta gtgaattatt ctgaaaccta agtgactaca   10800

agcaaaaata tcttgagaag ggataacata ttatttcctc cctgagtaat tactcaacct   10860

gcaggcaata atcacagcag tggctggcat tgtaacagaa ggactgatat caagtcccaa   10920

gacacagtac tcagttaaaa agacataaat gacaaacagc tcaacagtgt tatattaaga   10980

agttaagctt gaaggtgaca aaaagctggg ttatagtggg agtttataac atgctcatga   11040

attttgaaaa tgcaatcatg atatctgtgc atatttactt caaatagatg cgttctgtga   11100

gactctaggg ttactatgag gtgtactcag ttgcagtttt aactttacag aactaaatag   11160

ttaaatgatt ttgacagcac cttagaggat tattgactac atgttcagcc taccaattgc   11220

agaaaacata atggaaagcc tgggtgggca ctacatttca gagcatggca ttagcattgg   11280

gtatcactca tgacacagat gggccttgtc tgcttgggga gtaccttgcc ccatgtggca   11340

agtttgccgc tttggcagga aggcctgatg tgaagctaga ttgagaaggg agaaggtgtg   11400

cagtttgtaa tacttaaaca aggagttcac taacttgtaa gtgagtcatc agggaagaaa   11460

tgtaatcaga actgagaaag ccagaccagg ctctcatcta attccaccca catctgtctt   11520

gtactttata gtcttcagat gccttcattc acccagtatc cccaggtggt aagaagcaca   11580

tgtgttatca ttgccattgt caagatgagt gaattaactt ttttataagc agtctataaa   11640

catttactgt tctggatcat atctttattc tttttgcatt tacctagcat ttcaaccacc   11700
```

```
aatttgtttt tattccttac acaatttcat taagattttg ggggcaggat aaagtgtaac   11760

aacagataat gaatatgatg taatttcagg tttgcctggg aactcaaaat tgtaggttat   11820

tatggggatt aagtgaggaa acctgaggcc ctgggaagtt ttaagtggct ggtcctcagt   11880

tgcccctcca tgtggcaaag ctggaaccag aacccacatc ttttctagtc ctgcaagttt   11940

tctgctctat tgccctctct tggtaggaaa acatcacaga ccatgaggct tcacttaaag   12000

gtggagaaag gacaagaggc agagagactc cacaagttct agctatgagg tttccaaaaa   12060

aataacagaa aagagatttt cttgactttt attatggtta ggtataatca tgacccaaaa   12120

actccctccc tattgctaga gaaggaaaac tccttgcgcg aaatttattt tctgtttctt   12180

tggtctcaat ttgaaaattt aggtactttt ttttcaataa cagacgtttc aaacatgtaa   12240

aaacaaagta ctattctttt acctcaaatc tgaaggtcaa cagtgtatta ctctaacctc   12300

atatttcatg tataaataca gatgctcgtt gacttatgat ggggctatat cctgataaac   12360

ccattggagg ttaaaaatat tttaagttga aaatgcatta ataccccccc ataaacccac   12420

tgaaaagtaa aaaaaaaaaa aatctaaatc taaccatcat tgaggataat ctgtaccaat   12480

ttattaatac atctcctaac tcttaaactg tgataaaatg caaatgttta atacaaaatt   12540

ctaccttaga acaagaagaa gtcatttttt tttcattttg tctagatgtc taagtgattc   12600

tagatgctat aaatgtgcca gaatcagaga taggtatagg cttgtgccat tcaacaaggt   12660

agtcacggcc ttgtgtggta atttaaattt caattagtta aaactaaata aaattaaaaa   12720

tttagtttct atttgtgcta cacacatttc aagtgcccaa cagccacatg ttgctagtga   12780

ctaccatatg gaacattgca aatataggtt attcctatca ctacaggaag atctattaga   12840

cagtgcaggt ggttaggtca agcatcctga gaaaattatg agaggaagaa cagaggaaat   12900

taacatctat ctttatctct ttgatgcttc ctatgttttt ggctgttgac taaatggata   12960

cagccagggc accaaatcat gaaaaacagt tgagtaataa tttaataggt cactatactt   13020

ttaggaaata tcctcttcct tcattataca ctatcaagag aagagaactg aaataatagt   13080

ttcttctaat tgtctacaca atacgttttt ctggaatcct ccctttaaca aaaatcacta   13140

cccaaattat cttttatatt ctatgatggg gttcaggaca ctgtactccc aaatgtttta   13200

agctgaagga atttgagaaa acaagaaaag cagaaagatc actctgacct tcccctcacc   13260

ctccatcctg aaggaagtca taaaacctag gattttctga ccttcccatg tagcaagtca   13320

taagaccctc atgcgagagg tgccctgtt atacccagaa gaaagaagaa ttcccccccg   13380

ccttttttgtt tgagatgtgg tcttactctg tcacccaggc tagagtgcag ttgcatgatc   13440

atgttctgct gcaaccttga actcctgggc tcaagcaatt ctcctgcctc agcctcccaa   13500

gtagctcaga ccacagacac atcctccaca cttggctact taaaaataat tccttttttt   13560
```

```
tattatttat ttattttttt tttagagatg ggggggtctc gctatgttga cccggttgat   13620

cttgaactca tagcctcaag ggatcatccc accttggcct ctcaaagtgc tgagattaca   13680

ggcatgagcc actgctcctg gcctaagaat ccttatctcc aaagacaaag gtagaacaaa   13740

taagaatctg aacaaacagg ccttgctaat tttccccagt ttattaccat tagatcatac   13800

tctgccctat catatttctc cacaactatc cacactttat caaacttact gtaaaaaatt   13860

atcaggttga accacttttt tgggtcttcc ttaccaaggc ctctgtgtca cgtaaaacat   13920

attcaataaa tgagtacact tttcctttgt tattctgtct tttgttatag tggcctcagc   13980

catgaaccta ggaagggtgg aagaaaaggt attttttccta ctctatatct agtatattcc   14040

aagaagcata gaatgattgt ttagaaagag gaaaaatact tcaacagggt acctacaaac   14100

ttttgagagc aagaaataat aaagacagtc acattttact gcacagtgaa aaccgctcaa   14160

aaccctacag gacaactaat atgacctgtg aaaaaagcaa tattagcttc gttagaagct   14220

ttccagtttc ccagatttaa attccttaag gttgagcact gaaatatttg tggagaatca   14280

cacaagcctg ttatgtgaca aggtctcatt acccccttaa gggtgctcat ctttcacaga   14340

aactcatttc acatctcatc agttgcaacc atgagctggg gaaactggtt tctcatttct   14400

cagaggtaag aatacagaca cagaattcag aataaaggac tagaattttt ccctaatgag   14460

actaggctca agcaaccccc acttctggaa atggaataag cctttgctg tttcccacag   14520

ggcacttgac agtgataatt gtgacacatc tcaaaggtat ttcaggagtc tcaggggcat   14580

atgacaggag tgtttgttcc aggtaagcag ttactggctg gtgatggatg tttattttc   14640

ctttcatcca gcacttgaca gagtgatttt atagagcttt gcagagttct agaagtaaaa   14700

atattaggac acatgtctta aagagatgct ttagatacag tttcaaagga tgccaatgtt   14760

tcaaatccac tcatgcgact gaacaaagag atcaagagtt ttcccctcta cacattaact   14820

gagaacagaa atttgcaagt aatggttatt gtgtagagag ataagaaagg aactaagagg   14880

aggagggtag ccaggccttc agtgttcttc aaaactaact ggctgggagg caagggtctt   14940

tgggggtcta tggttcactc tgctcttccc acaataagta atttttaaa tcaagctaaa   15000

aattctatct gagcatagag tcaagataaa aataaagcac tccacaaata catcaaagtc   15060

ctgaccttga atgttcttcc tcacagttac tactaggtag agaccttgtc acttcctaga   15120

ttattttaac tataacctga ttactgcatt ctgcatttat ccttggggta tgattaaagg   15180

ttataaaatt caggttctta gaagtgaagg acaacatcca atctagagtt catcagttca   15240

tacaaaaata aaacacaatg aacatagatg atagcattct ctagatatga gaacattttt   15300

tttcctttga aaacagtggg gtggatcaag caattcttat gacttaagaa aatatgttcc   15360

atgtagggct aaaatagtgt ttccctgtct gaagtaagta tggtcatggt ggaacaattt   15420

cctacatttt ccaagttgaa aatatcaatt attacatact cattttttgct taatccagaa   15480
```

```
gttacctcct aacttactac gatttttgtg ttgtttttcag aatagaaatc aaaaccaaaa  15540

caccaccacc accacaaaag cctccaaaaa acagttttac aaagctggag attttgttta  15600

gagagaacta cctattcctt tgttgtggtg gacactttt aaaaattatt attatacttt  15660

aagttgtggg atacttgtgc agaacgtgca ggtttgttac gtaggtatac acgtgccatg  15720

gtggtttgct gcacccttta acccatcacc tacattaggt atttctccta atgctatccc  15780

tcccccaacc cccaacccac cgacagcccc cagtgtgtga tgttcccttc cctgtgtccc  15840

tgtgttcaac tctcacttat gagtgagaac atgtggtggt tggttttctg ttcctgtgtt  15900

agtttgctga gaatgatggt ttctagcttc atccgtgtct ctgcaaagga cgtgaactca  15960

tcctttttta aggctgcaaa gtattccatg gtgtatatgt gccacatttt ctttatccag  16020

tctatcactg atgggcattt gggttggttc caagtctttg ctattgtgaa tagtgctgca  16080

ataaacatat gtgtgcatgt gtctttatag cagaatgatc tataatcatt tggtatatac  16140

ccagtaatgg gattgctgtg gacactgatg gagagcaact caaacagtaa ttcctaacaa  16200

tgatgtttgc ttcatatttt agtttatatt ttaaaacata tttctgcatg atgtttaaca  16260

tcttgcaaaa tatatttcat atgcattatt ttatttgacc ctcagagcaa ctctggaagg  16320

ggttatctga tatattaatt tttcagtcct atttaaatat gtgaaaactg agtcaaaact  16380

ttagtgactt gcatgtgttt ccacaataat aaagtaatta gagctgctgc ctatgtcacg  16440

gaagagctct aactcctctt cagtctactc tctctctctc tctctatgtg tgtgtgtctg  16500

tgtatatata tatatatata tacacagaca cacacacaca catatatata tatatatata  16560

tgtaattttt ttttgagat ggagtttctt ttacccaggc tggagtgcaa tggcgcgatc  16620

tcagctcact gcaacctccg cctcccgggt tcaagtgatt ctcccgcctc agcctcctga  16680

gtagctggga ttacaggtgc ctgccatcac gcctggctaa ttttttgtatt tttagtagag  16740

acggggtttt gccatgttgg ccacgctgtt cttgaactcc tgacctcagg tgatccaccc  16800

acctcggcct cccaaagtgc taggattaca ggcgtgagcc actgcgcccg gcctatcttt  16860

tatgctcaat aaagtgctat atattactag tgataagaaa aaccatagac cctggaacca  16920

gtggattgga gttggagtcc tggctctgtg atttactgac caggccatgc tggccaactt  16980

actgatcctc ttagggctca gtttactcac ctataaaaaa agaataaaaa tagtgacatt  17040

tttacaatat tgttgatggg gtgctaaatg agctaatgat tacttacaat agtttttgtc  17100

aagcaataaa tgccattgtt actattatta aggttattgt gctctttaag tttttgttcc  17160

tcctatattc ttttacttt gtctatttt gcataatcca agagctgatt ccctgagtag  17220

cacttaataa tagttaaaat aaactgagca tttccggttg aaacatactt catatttaga  17280

aaataaaaag atctttgaca atttatattt tgctatcttt attgtgccaa atttattaaa  17340
```

```
tgatataatt gaattaaggt tttgcttatg agattgtgcc gtcatatcct gtaaatgaat   17400

aacatcatat ttctcttttt ttctgtcttt ctgcaagtag gtcaagctct gaaattactg   17460

tatcacatat ttgattatat attctaacaa tgttgatgtt gatccacatg gtgtattgtt   17520

caaattagaa aaaacagtgc cttcgtcagg ataggattaa cctgtcatca ggacacttgg   17580

cttggcaaac ctagtgtggg tagaatttct gctcctaatc aaaccctggc tgggtgccct   17640

tgtgcagtga acaacctgaa caactgtatg caatggccct gtcttcctga atcctataga   17700

ttaagcattg caacaagaaa tctaagaatg acatacctca tgatactttt tcacggtttt   17760

ccctgaattg catgtgcagg acctccagtt gacagttcca cagccacaat ttcctccaca   17820

gcgctgcacg aggaggcaac gtggaaagaa gaccacattg gccaacttca gctcttctct   17880

tatattgacc gagtaattcc tgggagtgca actgtaacgc ttggcatcat cattgagcct   17940

atccaggtca actgtaagca aatacatgca ctgtgtaagc aaacacaaca gtaagcacaa   18000

ttgctcagca tgtgttttgg ggaatagagt gggaagattc tgtgaggaca actttaatcc   18060

tgggattaaa tccatcctca ggctctcaat tactgggaac ctaaagtaaa agacctaatt   18120

tctctcttga tcccatctac cctttgaaaa taacaacaaa aacaaaacaa aacaaaaacc   18180

ttggctaaaa ttcatgtctt ggttcaaatt tccttgcatc tttttttatgc aaaaaaagtt   18240

cagaggaaag aaaatgaaac atttggcaaa ttaaaataat tgcctttatc ttcaaaaaga   18300

caaaataaac tgcttcttca ttctaaataa atcctgactc taagccatca cttaaatata   18360

atttaaatta tatctaggac acattagaga caaccactgt attatattta cctggcagtg   18420

aaatttcaca cataaatgta ataaagaaaa gggttttagt tttattttta acttcaaagt   18480

taatcaacat gttagagaaa atgatttttt tgtgtgtgaa tatggtgcat atttgtgcac   18540

tgggtcctag atggcagtat agcatagtgg ttaagtgctt tggagccgca gtaaagttac   18600

aactgccttc aatcacatca tggctatgtt tcctttagt tggaaagtta tttaatggct   18660

ctgaacttct gcttcctcat ctataacatg taatcatttg aagaattgaa tgtaacgtgc   18720

ctgcactcaa tgccagctat tcttactaat cttgattcat ctgaatctcc ccctctcaca   18780

ttctttcct ttaaagtcaa atggacaaaa tttaaaaata tactacgtct ttctccctct   18840

ttatgttttc ttctttggac attatataaa tgattatcaa gggatatggt cagtgggact   18900

tctatgaact aaaagcacca caatattttc aaagctaagt cataaatatt tacttgaatt   18960

caattcgcat tattgtgtta cataaattag atttgatttc gtgttctcca agtccatcca   19020

attatccatc catttggcag ccaaatcctc ttattggtgc atacatacat gagtatcttc   19080

tcacaagaac acagttagaa gcaagtcctt ttgtctgcac agaacccacc accctttccc   19140

aatgcacgcc cttgtgtgca ccaggccacc acagaaggaa tcccatgaat gttaggcagt   19200

tatcaccatg ttcattctaa actctagccc tggtaaatgt cttaggctta aactgaaact   19260
```

```
gcttaaggag aaggaagaaa aaaagccttt gggagcagag gtcaaaagtc aaggacagtg   19320

tcagtagaat gcatctaagg aaaattgcag gaacaagtgt ggaccatgag tccactaacc   19380

gcatccctgt ttgtcttttt atatctacaa ctgtgctttg attctcaagg gcagggattt   19440

atccccaatt gtcatacgct gagcccagga tactgtggga actaaataaa tgccaaataa   19500

tcactgtgca taatttattg ctgttttttt cttcctttgt aaagacatgt cataacttta   19560

gctataatca atccagattt aaattgaatg aactctgtct tgggaaagga accattttat   19620

tgctgctaaa gccctgaaaa taactgcaag caaagcagaa aggattacat aaatggatta   19680

agaagtgcag caatcatcca ttacaagtgt caccttgaga taaatactga tgctggcctg   19740

tgcattcctg ggcttgtgaa cagggctgat gcagagggcc aaatctgctg cttgtgataa   19800

tgggaagata tttgtctaac acggaggact aaagaggtac aattagcagg aagggatcgt   19860

gatgtgtgag aaggcagaga gggacaggac gcaagcggca acactgagtc tctgctttcg   19920

ttcagccctc tgctgaacta tgtcataacc ttacagatat gactacattt agttgttccc   19980

cacccatttc aagtgagtat tatttgctaa gagttaacag taaatggtaa aactggaatt   20040

gaagcctttc ccccttttgc tccatagtct ctgtcacttt aagcagaata gagggatggt   20100

cagtaagcca ttagttgaag gaagaagacc agtgttatga gggctgtact ggactttcct   20160

gtctgatgtt gaaccagggt tgggtggtga atggccacat ccttatcttc agaagacacc   20220

caagccaaag tacagcatgc cttccctata ggaattccaa taaactccaa agtgccctcc   20280

acaaaccagg agaaggcatg taagcctcat tctatttgaa accaaactcc tcacattgta   20340

taactctttg actagcattg gttactttca tttcttactc accatgagga gattcacaat   20400

tctgtcagtt ttatgcatca attcactaat gtcactaaga actgtgaccc agtgtgactg   20460

ctgtagaatc cacctgccct acatatcagg cgattgaaat caccgaggca ctcaatttag   20520

aattagaact gaaaggttgt tctgactgga tgcaaataac ttcaaagcgt gattgcagac   20580

tttctgcagg ggatattgag tttccagtca aagaagactg ataagccagt gcagcagagc   20640

agggagccag acagaggctg agcagcaatt aaggtttctg gtgcttgggt tagaaggaga   20700

attctagagt gagacttctg ggagggagac aggccaagtg gtgtcaaccg agagagaggg   20760

gctgcccttt ctgttcctgc atcagtctcc atagctgaac attcagagca tcaagggtgt   20820

tccaaattta attcaagggc ccgctaattt caactaacgt cccttatttc atcccagtct   20880

acatcatgga ataatccctc tttttctgtc attctgaatt ttagttttgc tttatcaaag   20940

ctctttgaca tcaattaagt tttttgggcc tcatacaggc agttttctgg aaaggctggg   21000

aaggctcccc tgtcctcaaa aacttccttt ggacatactg gtaaagtgtg gggtgctgca   21060

cagtgcacag gggcgcactt ttccttctgc agccctgcct ctaggtgcag cctaatcaca   21120
```

```
gaggtgcttt gagatgtaat aagaatgctg ggatctgagc tctagaatgg ggatgtgaat   21180
gcacaccctt ttatagtttc taatattagg tgtgggagga aggagagtca acctgttctt   21240
tttgatcctg gccatctaga ctactaagtg ctgtgttcat catgagtgca tgaaatactc   21300
ataaatgcta tgaattacat acaatcatta ctcttacttt tgcagttgag gaaactgagc   21360
cttttcaaaag ttaagaaaaa aaaaaaaaaa acttgtccac agccatacaa ccagtcagtg   21420
gtagagccag agtttgaatc caggcctctt catgcctttt gtacattatg agcccagtgt   21480
aaagatttga aggagggttc agagagcagc ttccacaagc gatgctgaag tcttcccacc   21540
agaggaccac ttgctgtgca aatgacctgg cttcctaggt gcacccatag gcactaacct   21600
gtcattttca caatgtcatt aatacacata cccaagcacg agcagctgtg tatcctcatc   21660
cacctattca gttctgacta ataaaccagg cagctattca gagtctactt ttgtctttgg   21720
tattgtgata aaacatttcg tccttttatc tgaaccgagt ggactttggc caatgcacac   21780
tcttcctttt gtcctcattt ctccttgaac cctttcttgc ctcatctagg agctgaatgg   21840
attgatagca atgatttgtc ctcagtggga acaaatgcca ggatcctaaa gattctagtt   21900
tctgtaggac agataaaacc aatataatat ttcacatact tggcaagcac aacatgggtg   21960
gtgatcagct taagataaaa atttaaaaat ctattcctta ttaaagtgaa acatatttat   22020
tattttatac aagttacctg ttctggtgga cagaagtcaa aatgtgcctt actgggtcaa   22080
aatcaaggta tgtaaaggta agtctgtttt tgtgaataca aaaattcatt atgaaacaaa   22140
ataatctcct cactttgaac atgggaaagc acctttgttc tccacatgca caataattta   22200
ctgcttgttt tggtcaacaa gaggatggtt tccttgagtc agtctctaaa cattaagtta   22260
tcagttggct ttcactgtgc tggccattca tcaatcttta ttctgatagt agaatcacat   22320
gcttttttct cttgatcatc cacagactgt cagagaatcc aattaaactg ctgcatgtcc   22380
ttgaagacag tcagtaatct ttttcttttc ttttcttttc tttttttgag acagagtctt   22440
gctctgctgc ccaggctgga gtgcagtggc atgatttcag ctcaccataa cttccgcctc   22500
ccaggtttaa gcaattctcc cgcctcagcc ttctgagtag ctgggactac aggtgtgtgc   22560
cacatgccca gctaattttt gtattttcat tagagataga gtttcaccat gttggcacca   22620
gtaatcattt tattgttgtt acaaggtcta gcctttataa tgctaaagtt ctttataaac   22680
tcttagcagg catgcagcag cagcctacat actagtgcat atttaccaca tggtgatggc   22740
atgtggagaa tgagcactca aagtagggcc atgatgtttt tgaaaaccat gctcttgttc   22800
ttctgttttg ctttctctgg catctcagct tgctatatta ttttaatctt ctagagctca   22860
agtcaaaagg catattcact ctacatctcc tatgactcct tctctatgta ctcaccacac   22920
tttttctgcc ctctattata gcatttactt catagacctt gttttgtttt ctttgcagat   22980
agtccaactt acaatggttc aacatgagtt tttttttttt tactttttga tggtgctttc   23040
```

```
agctgtgtat gttaatggtg agcacccata aaaccattct gtttttcact ttcagtaaag 23100

tattcaataa attatatgag ctattaaacc tctattataa aataggcttt gtggtagata 23160

atactgacca actataggct gatatatgcg ttctgaacat gtttaaggta ggctaggctt 23220

agctacgaag ttcagtaggc tatgtgtatt gaatgtggtt tgacttaact atattttcca 23280

attacaatgt gtttattggg atgtaaaccc atcaaaagtt aagaagcatc catattcagg 23340

tgcttctctt ctattgaact aaaaaagttg ttggaggtag agagctaatc atctttttat 23400

cccttctctt ctagtacttt gtccctaatg taaggaccaa atgcagctca ttcaagctca 23460

cttctaaaac catttgactt caacgattag gagcaaggtg ctgctgaagg aagcacaaca 23520

tcgtctttgt gccagattcc ctttgcaaga aatagacact caataattac tacctgaatg 23580

aatcagataa accatggatt ttttcagttt aattttttat cacaaaggtg aaacaattcc 23640

aactatcttt caggaatgca tagagtatta ttaatacttt atatgttgaa tgtttggatc 23700

ttatctcaag actagtctag gatgtggtgt agtgcgaaag tgttaggtta gaattaagaa 23760

actaggattt agaaccatct ctgccaagga tgaaccaaga tgcatgagat gactggcacc 23820

aagatctgtg aaatatagga gtggcacaca tggtagagca tggtcttgag aagactggtt 23880

ctcagatgca aacatcaagg tgctaaggaa cattgccttt gtcaaatggg agacagtgcc 23940

ataatctgtt atgaaaagtg ctaaacattt ccctttaatg ttgcagcacc aggtttatga 24000

tgctttgggg tggggtggga ggtgagggga ctataggaat aattgtatta ttttttgttaa 24060

acaaccaggg gctctcagcc tttctcaagg ttcataagtt caccaggagt cttcatcctt 24120

atgaatatta caacctcact gtgattttca gaatccctct tctataaatc agcacataat 24180

tatgaaaact gttttcacat ttcaatccca atgcagaagt gcaaataaat ctggaaagga 24240

caattatttt ataagtttta atgagggact atcaggatac tttaacttaa aattatgaaa 24300

gacactgaat tttgtgactc cacatgtggg tttaacatct aaagaataaa aacatttacc 24360

acttgttttt acacaaatta acctaaatca cagcaaaaga ttcttaatca gacaattcct 24420

gattttcaag gtttagaagc attgtgaagc aacgagtgaa tgcaaactta ctgagcaact 24480

actatgtatc cagcactttg tgagatgctt tcacaaaatc aaatttcatt taattctcac 24540

agcaaaccct catcttagat attacaattc ccattggatg gatgtagaaa ctgagttgca 24600

gaggacttaa gtgacttgcc taaagccact ggacgtaagt agatattcag cacatatgta 24660

ctggaaaatc aatggatgac tgaatgaata tctggaaggc actgaattag ccatgaaagc 24720

agtaacacca tcataaagcc attctctgaa ccctgggaat tcatgacctg gggtgatgta 24780

taaagcatat ctatgaaatg aaaaattttt taaaaaacaa gttaggagat gaaggtctta 24840

aaatttcttg ttctcatttta ctagactatg aatccctgag ctttaaacac cattgagttg 24900
```

Page 15

```
ctcacagcat gagctttgca gccaacaagg ccaagttcat gtcatgattc tctattttct  24960
agctctcaca gaaactttct gaattttttt cttttactat gcaaaatggg aatcacagta  25020
gctcctgcca aggaacttgt taagattaaa tgagttttga gtgtttgaag cacaggtcta  25080
aatcctacct ctcagtaggt atgcccacat tattactgaa gtgagtaaca cagatcaaag  25140
aaggaagttt aaatcagaag cacctaaaac tagaaggagc tgagattctg taattggtga  25200
ttactaagga atagaaggcc atgcccacct tgaactaaat acaaaaagcc aatgatcagg  25260
tgtcttcagt ttgattacat cagacgtaac actatccttt gcaagtgtat tagtccattc  25320
tcatactgag ataaagaaac acccaagact gggtagttta taaagaaaag aggtttaatg  25380
gcctcacagt tatgcattgc ctgggaggcc taaggaaact tacaatcatg gcagaaggcg  25440
aaggagaagc aaaggcacgt cttacatggt ggcaggaggg agagcatgtg tgcaagtgta  25500
ggggaactgc cctttataaa atcatcagat cttgtgccac tcactcacta tcacaagaat  25560
agcatgggga aaaccatccc catgattcaa ttatctccat cttgtttctc ccttgacatg  25620
tggggattat ggggattatg gggattgcaa ttcaagatga gatttgggtg gggacacaat  25680
gcataactat attagcaagt aaagacactc agtgagttgg atctctcagc accagcaggg  25740
cctacaagca tatatgctct aggagcagtg tagtgtctcc ttaagtctag tggggcataa  25800
aggaaaacaa tcccataata attttccaat gcttcacaga aaaaaattag cacagcaaac  25860
acaaggaaca cacatttctc tttaacaaga gtaattgcag tggaaaatgc acatttgttc  25920
atccgacgct aaaagttacc tatggctttc cactgtcaac tggatttttc ctattgattt  25980
gcatttgaat gacatgccta gatgagggga ataactttga taatgagggt ggggttagga  26040
tatccacaaa gacggacaac tgcgtctagg atgaaagcag aggtggcaca ggcaccagga  26100
ggaaaaacaa ctgaaagttg tcccactgct gagattttct taaaatattt catgtgtgtg  26160
ccctcataga cacacacaat atgataaaca acaatatggt ttttatgaat gcttgctggc  26220
aaacagagta agtgaggcag ctagatactt acaaatcata tgagtcataa acagtggcaa  26280
aagtctctaa aagaaaagct tagcagaaaa aacatccaat aagcaaaata gtgtcagaaa  26340
atttctggat aaatagtatc agaaaagttt agtacttgga gataattttg aaaacttta   26400
atgagtacac tgattataca gataattaaa taagacaata tttgccaaat actatctgtg  26460
aggctctcca gattactgat ggttatctta gagccttata gggaagacag cagagcaatt  26520
aatagaaata tcttggttct gtgcagagtt ttgcaagcaa ttcaaataat aacagtagct  26580
atcatttatt gagggtgtta gatactcttt cattacctaa tcctaacaca aatttycaaa  26640
gtgcttataa ttagagccat tttacaaaga gaagaaaata gagaatcagg ggtctgtaag  26700
tgacttctcc aaggccactg ctactgattt taggatttga gttagaattt tattacaagt  26760
tagtttgact ctcaagtcca tgctctttcc attgcaacgt ccttctttct tttgctctat  26820
```

```
ttctattaaa tttatgccaa acaattttaa tattgataaa taaaactttc acttggtaaa   26880

ggtaccaaat ataccacatg gttcaggaaa ctcaatgaag ctaaccatct ttcaataata   26940

gaaactatta ttaacaataa tgtaatatta ataagcaaca caagttatta ttaatgtcta   27000

ttatctactg atgtcaccag tacctcctta atttacagag atgtagttac agatatctga   27060

agactgactg atctgactca tcactggtgt cggccaacag cttttggcaa attcttaacc   27120

caagtatcaa ataggcagac agagaaaatt gcaagcactc agtttctaaa atatgttcat   27180

atgttaatgc tctctgaata atttcctaca tttgaaatca tttttgaaaa atcaaaactt   27240

gtgtcctcct gtttagcatg cagtggcatg acaaagaaac agcaataaat gataaaattt   27300

ttttaaagaa cctattctga cttaagagaa ctcagaacga atgaaaacat actgatataa   27360

aacatttatt tcatttattt ctcagtttct tatgctagtt atttacctgt aaataatttg   27420

caaattagag tcaaatgttt tagattttag aggaaaatgt catggagaaa ataatagaat   27480

tggtattaga tccttggaaa tgggttggta actgttccac agttgtaaca tctaaccatt   27540

tagagtctgt aaaaatcaca tatttcaaac gtcatcattt ggaactaatt tagtatcaag   27600

atgtttactg cactcaatat taaaatactg ttttttttgtt tgtttgtttt ttgtttttttt   27660

tttttaaagc agggtcttca ctctgttgac caggctggag tgcagtggtg cagtcacagc   27720

ccatggtagc cttgaactac ccgggctcaa gtgatcctcc cacctcagcc tcctgagtag   27780

ctggaactac aggtatatgc ttcacgcgtg gctaactttt gtattttttg tagagacagg   27840

ttctcaccat gttgcccagg ctggtctctc actcctgggc tcaagcgatc tgcctacctc   27900

ggcctcccaa agtgttggga tcacagcagt gagccactgt gtcgagtcta aaacactttt   27960

taaaagagga gtggatttga attttagcat gtgtatctaa aaatgattac ttttttggaga   28020

acaatatatt ttaattatta atttaaaact attaatttgg aacaccccaa taattttgtt   28080

catatttttaa tcaaaacaca agctttgaaa acaggtttcc ctccttgcca ttatgtcctg   28140

gattttttctt tggtgaacac actatcattc tagaaagtca agttctcctg gaataagaaa   28200

aagaacagat cttacttata ttgtttatct ccataaatca cctctccgtt aatgtccagt   28260

cagggctgat catttcttaa tttagaaatg ttgaatttta tgctatgaac ttgaataaat   28320

atacattgtc cttaaattca taggtatatg ttttttctgt tttgttttgt tttttttaatt   28380

ttatgattat tatactttaa gttttagagt acatatgcac aatgtgcagg tttgttacat   28440

atgtatacat gtgccatgtt ggtgtgctgc acccattaac tcgtcattta acattaggta   28500

tatctcctaa tgctatccct ccccccctccc cccaccccac aacagtcctc agtgtgtgat   28560

gttccccttc ctgtgtccat gtgttctcat tgttcaattc ccacctatga gtgagaacat   28620

gcggtgtttg gttttttgtc cttgtgatag tttgctgaga atgatggttt ccagcttcat   28680
```

```
ccatgtccct acaaaggaca cgaactcatc atttttatg gctgcatagt attccatggt   28740

gtatatgtgc cacattttct taatccagtc tatcgttgtt ggacatttag gttggttcca   28800

agtctttgct attgtgaata gtgctgctat aaacatacat gtgcttgtgt ctttatagca   28860

gcatgattta taatcctttg ggtatatacc cagtaatggg atggctgggt caaatggtat   28920

ttctagttct agatccctga ggaatcacca cactgacttc cacaatggtt gaactagttc   28980

acagtcccac caacagtgta aaagtgttcc tatttctcca cattctctcc agcacctgtt   29040

gtttcctgac tttttaatga ttgccattct aactggtgtg agatggtatc tcattgtggt   29100

tttgatttgc atttctctga tggccagtga tgatgagtat tttttcatgt gttttttggc   29160

tgcataaatg ccttcttttg agaagtgtct gttcatatcc ttcacccact ttttgatggg   29220

gttctttgtt tttttcttgt aaatttgttt gagttcattg tagattctgg atattagccc   29280

tttgtcaaat gagtaggttg caaaaatttt ctcccattct gtaagttgcc tgttcactct   29340

gatggtagtt tcttttgctg tgcagaagct ctttagttta attagatccc atttgtcaat   29400

tttggctttt gttgccattg cttttggtgt tttagacatg aagtccttgc ccatgcctat   29460

gtcctgaatg gtattgcctg ggttttcttc tagggatttt atggttttag gtctaacatt   29520

taagtcttta atccatcttg aattaatttt tgtataaggt gtaaggaagg gatccagttt   29580

cagctttcta catagggcta gccagttttc tcagcaccat ttattaaata gggaatcctt   29640

tccccattgc ttgttttttct caggtttgtc aaagatcaga tagttgtaga tatgcggcat   29700

tatttctgag ggctctgttc tgttccattg gttgatatct ctgttttggt accagtacca   29760

tgttgttttg gttactgtag ccttgtagtg tagtttgaag tcaggtagca tgatgcctcc   29820

agctttgttc ttttggctta ggattgactt ggcgatgtgg gctctttttt ggttccacat   29880

gaactttaaa gtagtttttt ccaattctgt gaagaaagta a                       29921
```